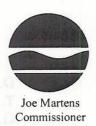
## New York State Department of Environmental Conservation

Division of Environmental Remediation

**Remedial Bureau C, 11th Floor** 625 Broadway, Albany, New York 12233-7014 **Phone:** (518) 402-9662 • **Fax:** (518) 402-9679 Website: <u>www.dec.ny.gov</u>



August 10, 2012

Mr. Donald Campbell National Grid Site Investigation and Remediation 287 Maspeth Ave. Brooklyn, NY 11201

> Re: Equity Former MGP Site Pre-Design Investigation Work Plan No.2 Addendum 252 and 254 Maspeth Ave. Property .Site# 224050

Dear Mr. Campbell:

The New York State Department of Environmental Conservation (Department) has reviewed the Equity Former MGP Site Pre-Design Investigation Work Plan No.2 Addendum for the 252 and 254 Maspeth Ave. property, dated August 6, 2012, which calls for the installation of 4-inch PVC wells in borings where visible NAPL is observed. The Department concurs that the installation of these wells will serve to inform the location and spacing of the permanent recovery wells to be installed as part of the Product Recovery IRM to be conducted later in the year. The Pre-Design Investigation Work Plan No.2 Addendum is hereby approved.

Data collected thus far through the Remedial Investigation suggests that there may be a source of recoverable tar near the southern corner of the 222 Maspeth Ave. parcel. It is the recommendation of the Department that National Grid evaluate the possibility of installing a series of pilot wells in this area similar to those referenced in the PDI Work Plan No.2 Addendum for the purpose of evaluating the viability of installing a network of permanent recovery wells prior to the installation of new recycling equipment in this area as referenced in Cooper Tank's correspondence of June 2012.

Sincerely,

Henry T. Willems Engineering Geologist 1

D. Campbell, National Grid
T. Leissing, National Grid
G. Cross, NYSDEC
M. Ryan, NYSDEC
S. Arakhan, NYSDEC
A. DeMarco, NYSDOH
D. Hillcoat, Cooper Tank

Dear Mr. Campbell:

The New York State Department of Environmental Conservation (Department) has newlewed the Equity Former MCP Site Pre-Decign Envertigation, Work Plan No.2 Addendum for the 252 and 254 Mespath Ave. property, dated Auguar 6, 2012, which calls for the installation of 4-inch PVC wells in borings where visible NAPL is observed. The Department concurs that the manifetion of these wells will serve to inform the location and maxing of the permanent recovery wells to be installed as part of the Predict Recovery IRM to be conducted later in the year. The Pre-Design investigation Work Plan No.2 Attiendum is hereby approved.

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August 6, 2012

Mr. Henry Willems New York State Department of Environmental Conservation Division of Environmental Remediation 625 Broadway, 12th Floor Albany, New York 12233-7013

Subject: Pre-Design Investigation Work Plan No. 2 Addendum– 252 and 254 Maspeth Avenue Property Potential Barrier Wall Areas Design Equity Former Manufactured Gas Plant (MGP) Site Brooklyn, New York NYSDEC Site No.: 224050, Order on Consent Index #: A2-0552-0606

## Dear Mr. Willems:

National Grid is submitting the following Pre-Design Investigation (PDI) Work Plan No. 2 Addendum for the 252 and 254 Maspeth Avenue property located in Brooklyn, New York. Both parcels are located within the footprint of the former Equity Manufactured Gas Plant (MPG) site (the Site) which consists of three adjoining properties – 222 Maspeth Avenue, 252 Maspeth Avenue, and 254 Maspeth Avenue. This PDI is being conducted by National Grid pursuant to a Multi-site Order on Consent and Administrative Settlement with the New York State Department of Environmental Conservation (NYSDEC), Index # A2-0552-0606, and in accordance with applicable guidelines of the NYSDEC and the New York State Department of Health (NYSDOH). The PDI activities are scheduled for summer of 2012 in conjunction with ongoing Remedial Investigation (RI) activities and will provide additional information needed for potential design of subsurface barrier walls along a portion of the 252 and 254 Maspeth Avenue parcels with the highest potential for off-site migration of MGP-related denser-than-water non aqueous phase liquid (DNAPL) migration.

Please refer to the original PDI work plan dated July 9, 2012 for a summary of site background, site physical characteristics, utility clearance methods, soil boring advancement methods, investigation-derived waste management, community air monitoring program, and site survey details.

## **Pre-Design Investigation Addendum**

This PDI addendum contemplates the installation of 4-inch PVC wells with 20-slot screens at PDI locations where visible non-aqueous phase liquid (NAPL) is observed. In areas where no NAPL is observed, we intend to tremie-grout the borehole to the ground surface upon completion. The wells will inform the spacing and final location of perimeter recovery wells to be installed as part of the Interim Remedial Measure (IRM) for product recovery to be conducted later this year.

Specifics regarding the proposed approach for installation of monitoring wells in completed PDI borings where visible NAPL is present is as follows:

• Upon completion of soil sampling activities, 6.25-inch ID hollow stem augers (HSAs) with an expendable plug will be advanced down the borehole to the target depth, allowing the well to screen the top of the intermediate clay surface with an appropriate length sump.

Mr. Hank Willems August 6, 2012 Page 2

- Four inch Sch. 40 PVC well materials will be emplaced into the borehole, including a solid flush joint (F/J) sump (minimum of 2 feet in length but may be lengthened to increase sump capacity if larger volumes of NAPL are anticipated to collect in the wells), a minimum of 10-feet of 20 slot screen, and solid riser to approximately 1 foot below ground surface. Likewise, the screen length may be increased to fully screen zones of visible DNAPL.
- The annular space around the well sump will be sealed with granular bentonite, and the annular space around the screened interval will be filled with #2 sand to two feet above the top of the screened interval.
- A two foot bentonite seal will be emplaced above the sandpack, and the remainder of the annular space will be tremie-grouted to grade.
- Wells will be completed at the surface with a flush-mounted, limited access road box set slightly below grade to avoid damage by ongoing site operations.

If during the PDI boring installation it is determined that there is significant DNAPL detected at any of the PDI borings at the ends or within the potential wall areas based on visual observations, National Grid may request that you approve the advancement of additional boring(s) in real time or after the field work is completed, for a subsequent mobilization.

Following installation, wells will be developed to remove solids and promote hydraulic connection with the aquifer. Wells will then be monitored as possible during the timeframe including completion of current RI activities and before/after shallow soil IRM work at the 254 Maspeth Avenue parcel, to the extent possible, to determine if DNAPL collects in any of the wells. If present, DNAPL will be periodically removed to evaluate relative recharge/recoverability characteristics. Upon acceptance of the formal IRM recovery well work plan and design, these wells will either be incorporated into the recovery well program or properly abandoned per CP-43 protocols.

If you have any questions, comments, or require any additional information, please do not hesitate to contact me (718) 963-5453 or via electronic mail (e-mail) at <u>donald.campbell@us.ngrid.com</u>.

Sincerely,

anabell

Donald Campbell Project Manager

- Cc: A. Demarco, NYSDOH (Electronic Copy Only)
  - T. Leissing, National Grid (Electronic Copy Only)
  - A. Hecht, National Grid (Electronic Copy Only)
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